| | Lake Benbrook - Sample Information | | | | |
|------------------------|------------------------------------|---------------|-------------------|--|-----------------|
| TCEQ Site ID # - 15151 | | | ICR Prefix - none | | |
| # | Date Sampled | Sample ID | Clump? | MS? | Matrix Spike ID |
| 1 | 3/7/2001 | 2001-0308-021 | | Y | 2001-0308-022 |
| 2 | 4/10/2001 | 2001-0411-029 | | | |
| 3 | 5/8/2001 | 2001-0509-032 | | | |
| 4 | 6/5/2001 | 2001-0606-019 | | | |
| 5 | 7/2/2001 | 2001-0703-005 | | | |
| 6 | 8/7/2001 | 2001-0808-005 | | | |
| 7 | 9/4/2001 | 2001-0905-011 | | | |
| 8 | 10/2/2001 | 2001-1003-005 | | | |
| 9 | 11/6/2001 | 2001-1107-027 | | | |
| 10 | 12/4/2001 | 2001-1205-008 | | | |
| 11 | 1/8/2002 | 2002-0111-004 | " | | |
| 12 | 2/12/2002 | 2002-0213-003 | | | |
| 13 | 3/5/2002 | 2002-0306-012 | | | |
| 14 | 4/9/2002 | 2002-0410-011 | | | |
| 15 | 5/7/2002 | 2002-0508-008 | | | |
| 16 | 6/4/2002 | 2002-0605-017 | | | |
| 17 | 7/23/2002 | 2002-0724-021 | | | |
| 18 | 8/6/2002 | 2002-0807-010 | | | |
| 19 | 9/10/2002 | 2002-0911-008 | | | |
| 20 | 10/8/2002 | 2002-1009-016 | | Y | 2002-1009-017 |
| 21 | 11/5/2002 | 2002-1106-018 | | | |
| 22 | 12/3/2002 | 2002-1204-011 | | | |
| 23 | 1/7/2003 | 2003-0108-025 | | | |
| 24 | 2/4/2003 | 2003-0205-018 | _ | ļ | |
| 25 | 3/4/2003 | 2003-0305-019 | | | |
| 26 | 4/8/2003 | 2003-0409-023 | | | |
| 27 | 5/6/2003 | 2003-0507-045 | | | |
| 28 | 6/3/2003 | 2003-0604-022 | | 1 | |
| 29 | 7/8/2003 | 2003-0709-015 | | | |
| 30 | 8/5/2003 | 2003-0806-036 | | | |
| 31 | 9/9/2003 | 2003-0910-037 | | | |
| 32 | 10/7/2003 | 2003-1008-009 | | | |
| 33 | 11/4/2003 | 2003-1005-011 | | 1 | |
| 34 | 12/9/2003 | 2003-1100-038 | | | |
| 35 | 1/12/2004 | 2004-0113-025 | | | |
| 36 | 2/3/2004 | 2004-0110-020 | | | |
| 37 | 3/9/2004 | 2004-0310-020 | | 1 | |
| 38 | 4/6/2004 | 2004-0407-007 | | 1 | |
| 39 | 5/4/2004 | 2004-0505-032 | | 1 | |
| 40 | 6/8/2004 | 2004-0609-043 | | İΥ | 2004-0609-044 |
| 41 | 7/6/2004 | 2004-0707-048 | | † <u> </u> | |
| 42 | 8/3/2004 | 2004-0804-025 | | 1 | |
| 42 | 9/7/2004 | 2004-0908-014 | | + | |
| 43 | 10/5/2004 | 2004-0908-01- | | + | |
| | 11/2/2004 | 2004-1008-043 | | | |
| 45 | | 2004-1103-043 | | 1 | |
| 46 | 12/7/2004 | 2005-0105-039 | | | |
| 47 | 1/4/2005 | | _ | + | |
| 48 | 2/8/2005 | 2005-0209-050 |) li | | |



Address: 140 FM416

Streetman, TX 75859-3019

Report Date: March 19, 2001

Sample Receipt Date: March 8, 2001

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2001-0308-021

Sample Information

| Client Sample ID: | BB-03-01-Proto-1 | |
|-------------------------|-------------------|--|
| Collection Date: | March 7, 2001 | |
| Collection Time: | 0950 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 15.0 | |
| Sample Type²: | field | |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹ Method: Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

2 Note:

A Matrix Spike (MS) was performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

RECEIVED

6116106

Project No.: 2001-0308-016



Address: 140 FM416

Streetman, TX 75859-3019

Report Date: March 19, 2001

Sample Receipt Date: March 8, 2001

Analyst: map

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report Matrix Spike**

ASI Sample ID #: 2001-0308-022

Sample Information

| Client Sample ID: | BB-03-01-Proto-2 | |
|----------------------------|-------------------|--|
| Collection Date: | March 7, 2001 | |
| Collection Time: | 0950 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 15.0 | |
| Sample Type ² : | Matrix Spike | |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | NUMBER OF ORGANISMS SEEDED / LITER | TOTAL MICROSCOPIC COUNT / LITER | PERCENT RECOVERY |
|-----------------|--|------------------------------------|------------------|
| Giardia | 28.7 | 18.4 | 64.0 |
| Cryptosporidium | 41.9 | 19.0 | 45.3 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's occyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

Project No.: 2001-0308-016



Client: Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: April 17, 2001

Sample Receipt Date: April 11, 2001

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2001-0411-029

Sample Information

| Client Sample ID: | BB-04-01-Proto | |
|----------------------------|-------------------|--|
| Collection Date: | April 10, 2001 | |
| Collection Time: | 0932 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 16.5 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| | ,, trout 1 100 area | |
|-----------------|---|------------------|
| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

Project No.: 2001-0411-029



Address:

140 FM416

Streetman, TX 75859-3019

Report Date: May 21, 2001

Sample Receipt Date:

May 9, 2001

cjf

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2001-0509-032

Sample Information

| <u> </u> | | |
|----------------------------|-------------------|--|
| Client Sample ID: | BB-05-01 Proto | |
| Collection Date: | May 8, 2001 | |
| Collection Time: | 0950 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 9.28 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

Project No.: 2001-0509-029



Address: 140 FM416

Streetman, TX 75859-3019

Report Date: June 13, 2001

Sample Receipt Date:

June 6, 2001

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2001-0606-019

Sample Information

| Client Sample ID: | BB-06-01 Proto |
|----------------------------|-------------------|
| Collection Date: | June 5, 2001 |
| Collection Time: | 0932 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | 7.05 |
| Sample Type ² : | field |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

Project No.: 2001-0606-018

² Note: A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.



Address:

Tarrant Regional Water District

140 FM416

Streetman, TX 75859-3019

Report Date: July 12, 2001

Sample Receipt Date: July 3, 2001

Analyst: map

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2001-0703-005

Sample Information

| Client Sample ID: | BB-07-01 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | July 2, 2001 | |
| Collection Time: | 0935 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 5.56 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED #/L |
|-----------------|---|----------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

Project No.: 2001-0703-004

² Note:



Client: Tarrant Regional Water District

Address: 140 FM416

Streetman, TX 75859-3019

Report Date: August 20, 2001

Sample Receipt Date: August 8, 2001

Analyst: map

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2001-0808-005

Sample Information

| Client Sample ID: | BB-08-01 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | August 7, 2001 | |
| Collection Time: | 0915 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 3.3 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman Envirochek | |
|----------------------|-------------------|--|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0 | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED #/L |
|-----------------|---|----------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

1 Method;

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

Project No.: 2001-0808-005



Address: 140 FM416

Streetman, TX 75859-3019

Report Date: September 13, 2001

Sample Receipt Date: September 5, 2001

Analyst: ksf

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2001-0905-011

Sample Information

| Client Sample ID: | BB-09-01 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | September 4, 2001 | |
| Collection Time: | 1020 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 5.53 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹ Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

Project No.: 2001-0905-010



Client: Tarrant Regional Water District

Address: 140 FM416

Streetman, TX 75859-3019

Report Date: October 12, 2001

Sample Receipt Date: October 3, 2001

Analyst: map

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2001-1003-005

Sample Information

| Client Sample ID: | BB-10-01 Proto |
|----------------------------|-------------------|
| Collection Date: | October 2, 2001 |
| Collection Time: | 1000 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | 7.09 |
| Sample Type ² ; | field |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 6.3 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method: Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

Project No.: 2001-1003-005



Client: Tarrant Regional Water District

Address: 140 FM416

Streetman, TX 75859-3019

Report Date: November 19, 2001

Sample Receipt Date: November 7, 2001

Analyst: ksf

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2001-1107-027

Sample Information

| Client Sample ID: | BB-11-01 Proto |
|----------------------------|-------------------|
| Collection Date: | November 6, 2001 |
| Collection Time: | 0920 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | 6.8 |
| Sample Type ² : | field |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 5.6 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

Project No.: 2001-1107-027



Address:

140 FM416

Streetman, TX 75859-3019

Report Date: December 17, 2001

Sample Receipt Date: December 5, 2001

Analyst: cjf

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2001-1205-008

Sample Information

| Client Sample ID: | BB-12-01 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | December 4, 2001 | |
| Collection Time: | 1017 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 5.73 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

Project No.: 2001-1205-008



Tarrant Regional Water District

Address: 140 FM416

Streetman, TX 75859-3019

Report Date:

January 28, 2002

Sample Receipt Date:

January 11, 2002

Analyst: cif

USEPA Method 1623¹ Giardia and Cryptosporidium Analytical Report

ASI Sample ID #: 2002-0111-004

Sample Information

| Client Sample ID: | BB-01-02-Proto |
|----------------------------|-------------------|
| Collection Date: | January 8, 2002 |
| Collection Time: | 0935 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | unknown |
| Sample Type ² : | field |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | . 0 |
| Cryptosporidium | Ō | 0 |

¹ Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

Project No.: 2002-0111-004



Tarrant Regional Water District

Address: 140 FM416

Streetman, TX 75859-3019

Report Date: February 26, 2002

Sample Receipt Date:

February 13, 2002

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2002-0213-003

Sample Information

| Client Sample ID: | BB-02-02-PROT |
|----------------------------|-------------------|
| Collection Date: | February 12, 2002 |
| Collection Time: | 1107 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | 26.0 |
| Sample Type ² : | field |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED #/L |
|-----------------|---|----------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

Project No.: 2002-0213-002



Tarrant Regional Water District

Address: 140 FM416

Streetman, TX 75859-3019

Report Date:

March 19, 2002

Sample Receipt Date:

March 6, 2002

Analyst:

map

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2002-0306-012

Sample Information

| Client Sample ID: | BB-03-02 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | March 5, 2002 | |
| Collection Time: | 0930 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 27.8 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | Ō | 0 |

¹ Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in source water.

Project No.: 2002-0306-012



Client: Address:

Tarrant Regional Water District

140 FM416

Streetman, TX 75859-3019

Report Date:

April 23, 2002

Sample Receipt Date:

April 10, 2002

Analyst: map

USEPA Method 1623¹ Giardia and Cryptosporidium Analytical Report

ASI Sample ID #: 2002-0410-011

Sample Information

| Client Sample ID: | BB-04-02 Proto |
|----------------------------|-------------------|
| Collection Date: | April 9, 2002 |
| Collection Time: | 0930 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | 19.8 |
| Sample Type ² : | field |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

Project No.: 2002-0410-010



Tarrant Regional Water District

Address: 1

140 FM416

Streetman, TX 75859-30

Report Date:

May 22, 2002

Sample Receipt Date:

May 8, 2002

Analyst: map

USEPA Method 1623¹ Giardia and Cryptosporidium Analytical Report

ASI Sample ID #: 2002-0508-008

Sample Information

| Client Sample ID: | BB-05-02 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | May 7, 2002 | |
| Collection Time: | 1000 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 8.47 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

1 Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's occyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

Project No.: 2002-0508-008



Client: Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

June 24, 2002

Sample Receipt Date:

June 5, 2002

Analyst: map

USEPA Method 16231 Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2002-0605-017

Sample Information

| Client Sample ID: | BB-06-02-Proto | |
|----------------------------|-------------------|--|
| Collection Date: | June 4, 2002 | |
| Collection Time: | 0945 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 6.80 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman Envirochek | |
|----------------------|-------------------|--|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0 | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method: Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

Project No.: 2002-0605-017



Tarrant Regional Water District

Address: 140 FM416

Streetman, TX 75859-3019

Report Date:

August 7, 2002

Sample Receipt Date:

July 24, 2002

Analyst:

map

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2002-0724-021

Sample Information

| Client Sample ID: | BB-07-02 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | July 23, 2002 | |
| Collection Time: | 0930 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 7.68 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 - |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2002-0724-020



Client: Address: Tarrant Regional Water District

140 FM416

Streetman, TX 75859-3019

Report Date: August 27, 2002

Sample Receipt Date:

August 7, 2002

Analyst:

ksf

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2002-0807-010

Sample Information

| Client Sample ID: | BB-08-02-Proto | |
|----------------------------|-------------------|---|
| Collection Date: | August 6, 2002 | |
| Collection Time: | 1030 hrs | |
| Matrix: | raw surface water | _ |
| Sample Turbidity (NTU): | 4.0 | _ |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2002-0807-010



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: September 30, 2002

Sample Receipt Date:

September 11, 2002

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2002-0911-008

Sample Information

| Client Sample ID: | BB-09-02 Proto | |
|----------------------------|--------------------|--|
| Collection Date: | September 10, 2002 | |
| Collection Time: | 0940 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 4.0 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman Envirochek |
|----------------------|-------------------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note;

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

Project No.: 2002-0911-008



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

October 24, 2002

Sample Receipt Date:

October 9, 2002

. Analyst: map

USEPA Method 1623¹ *Giardia* and *Cryptosporidium*Analytical Report Matrix Spike

ASI Sample ID #: 2002-1009-017

Sample Information

| Client Sample ID: | BB-10-02 Proto Dup. | - |
|----------------------------|---------------------|---|
| Collection Date: | October 8, 2002 | |
| Collection Time: | 1000 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 6.35 | |
| Sample Type ² : | Matrix Spike | |

Volume Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |

Analytical Results

| ANALYTE | NUMBER OF ORGANISMS SEEDED / LITER | TOTAL MICROSCOPIC COUNT / LITER | PERCENT RECOVERY |
|-----------------|--|------------------------------------|------------------|
| Giardia | 9.9 | 3.6 | 36.4 |
| Cryptosporidium | 9.9 | 5.3 | 53.5 |

1 Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2002-1009-016



Client: Tarrant Regional Water District

Address: 140 FM416

Streetman, TX 75859-3019

Report Date: October 24, 2002

Sample Receipt Date:

October 9, 2002

Analyst: map

USEPA Method 16231 Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2002-1009-016

Sample Information

| Client Sample ID: | BB-10-02 Proto |
|----------------------------|-------------------|
| Collection Date: | October 8, 2002 |
| Collection Time: | 1000 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | 6.35 |
| Sample Type ² : | field |

Volume Information

| Filter Type: | Gelman HV | |
|----------------------|-----------|--|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0* | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹ Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2002-1009-016



Client: Address:

Tarrant Regional Water District

140 FM416

Streetman, TX 75859-3019

Report Date: November 22, 2002

Sample Receipt Date: November 6, 2002

Analyst: cjf

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2002-1106-018

Sample Information

| Client Sample ID: | BB-11-02 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | November 5, 2002 | |
| Collection Time: | 1030 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 11.5 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman HV | |
|----------------------|-----------|--|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0 | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method: Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

Project No.: 2002-1106-017



Tarrant Regional Water District

140 FM416 Address:

Streetman, TX 7859-3019

Report Date: December 16, 2002

Sample Receipt Date: December 4, 2002

Analyst: cif

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID #: 2002-1204-011

Sample Information

| Client Sample ID: | BB-12-02 Proto | |
|----------------------------|-------------------|---|
| Collection Date: | December 3, 2002 | |
| Collection Time: | 1000 hrs | |
| Matrix: | raw surface water | - |
| Sample Turbidity (NTU): | 9.85 | |
| Sample Type ² : | field | |

Volume Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2002-1204-011



Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

January 24, 2003

Sample Receipt Date:

January 8, 2003

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2003-0108-025

Quality Control Batch No.: 199

Method Blank Laboratory No.: 2003-0108-036

Ongoing Precision and Recovery Laboratory No.: 2003-0108-037

Sample Information

| Client Sample ID: | BB-01-03 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | January 7, 2003 | |
| Collection Time: | 1130 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 10.2 | |
| Sample Type ² : | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV | |
|----------------------|-----------|---|
| Volume Filtered (L): | 10.0 | ~ |
| Volume Examined (L): | 10.0 | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

Project No.: 2003-0108-023



Client: **Tarrant Regional Water District**

Address: 140 FM416

Streetman, TX 75859-3019

Report Date: February 20, 2003

Sample Receipt Date:

February 5, 2003

Analyst:

USEPA Method 16231 Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2003-0205-018

Quality Control Batch No.: 203-1

Method Blank Laboratory No.: 2003-0205-014

Ongoing Precision and Recovery Laboratory No.: 2003-0205-015

Sample Information

| Client Sample ID: | BB-02-03 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | February 4, 2003 | |
| Collection Time: | 0920 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 12.1 | |
| Sample Type ² : | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV | |
|----------------------|-----------|--|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0 | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method: Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

Project No.: 2003-0205-016



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

March 20, 2003

Sample Receipt Date:

March 5, 2003

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium Analytical Report

ASI Sample ID No.: 2003-0305-019

Quality Control Batch No.: 207-1

Method Blank Laboratory No.: 2003-0305-009

Ongoing Precision and Recovery Laboratory No.: 2003-0305-010

Sample Information

| | The state of the s | |
|----------------------------|--|--|
| Client Sample ID: | BB-03-03 Proto | |
| Collection Date: | March 4, 2003 | |
| Collection Time: | 1000 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 13.8 | |
| Sample Type ² : | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV | |
|----------------------|-----------|--|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0 | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹ Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's occyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

Project No.: 2003-0305-019



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: April 24, 2003

Sample Receipt Date:

April 9, 2003

Analyst: map

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2003-0409-023

Quality Control Batch No.: 212-1

Method Blank Laboratory No.: 2003-0409-020

Ongoing Precision and Recovery Laboratory No.: 2003-0409-021

Sample Information

| Client Sample ID: | BB-0403-PROT |
|----------------------------|-------------------|
| Collection Date: | April 8, 2003 |
| Collection Time: | 1050 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | 11.5 |
| Sample Type ² : | field |

Volume and Filtration Information

| Filter Type: | Gelman HV | |
|----------------------|-----------|--|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0 | |
| | | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹ Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

Project No.: 2003-0409-022



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

May 21, 2003

Sample Receipt Date:

May 7, 2003

Analyst:

USEPA Method 16231 Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2003-0507-045

Quality Control Batch No.: 216

Method Blank Laboratory No.: 2003-0505-005

Ongoing Precision and Recovery Laboratory No.: 2003-0505-006

Sample Information

| Client Sample ID: | BB-05-03-Proto |
|----------------------------|-------------------|
| Collection Date: | May 6, 2003 |
| Collection Time: | 0930 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | 5.76 |
| Sample Type ² : | field |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

Project No.: 2003-0507-045



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: June 18, 2003

Sample Receipt Date:

June 4, 2003

Analyst:

USEPA Method 16231 Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2003-0604-022

Quality Control Batch No.: 220-1

Method Blank Laboratory No.: 2003-0604-016

Ongoing Precision and Recovery Laboratory No.: 2003-0604-015

Sample Information

| Client Sample ID: | BB-06-03-Proto | |
|----------------------------|-------------------|--------|
| Collection Date: | June 3, 2003 | |
| Collection Time: | 1010 hrs | - " |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 6.8 | \neg |
| Sample Type ² : | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED#/L |
|-----------------|---|---------------|
| Giardia | 0 | Q |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's occyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2003-0604-021



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

July 17, 2003

Sample Receipt Date:

July 9, 2003

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2003-0709-015

Quality Control Batch No.: 225

Method Blank Laboratory No.: 2003-0707-002

Ongoing Precision and Recovery Laboratory No.: 2003-0707-001

Sample Information

| Client Sample ID: | BB-07-03-Proto |
|----------------------------|-------------------|
| Collection Date: | July 8, 2003 |
| Collection Time: | 0930 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | 6.3 |
| Sample Type ² : | field |

Volume and Filtration Information

| Filter Type: | Gelman HV | |
|----------------------|-----------|--|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0* | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0.0 | 0.0 |
| Cryptosporidium | 0.0 | 0.0 |

¹ Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2003-0709-015



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: August 20, 2003

Sample Receipt Date:

August 6, 2003

Analyst:

USEPA Method 16231 Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2003-0806-036

Quality Control Batch No.: 229

Method Blank Laboratory No.: 2003-0804-002

Ongoing Precision and Recovery Laboratory No.: 2003-0804-001

Sample Information

| Client Sample ID: | BB-08-03-PROT |
|----------------------------|-------------------|
| Collection Date: | August 5, 2003 |
| Collection Time: | 0935 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | 5.5 |
| Sample Type ² : | field |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | . 0 |
| Cryptosporidium | 0 . | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2003-0806-036



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

September 26, 2003

Sample Receipt Date:

September 10, 2003

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2003-0910-037

Quality Control Batch No.: 234-1

Method Blank Laboratory No.: 2003-0910-029

Ongoing Precision and Recovery Laboratory No.: 2003-0910-028

Sample Information

| Client Sample ID: | BB-09-03-PROTO | |
|----------------------------|-------------------|--|
| Collection Date: | September 9, 2003 | |
| Collection Time: | 0942 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 5.36 | |
| Sample Type ² : | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method: Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

Project No.: 2003-0910-035



Tarrant Regional Water District

Address: 140 FM416

Streetman, TX 75859-3019

Report Date:

October 20, 2003

Sample Receipt Date:

October 8, 2003

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2003-1008-009

Quality Control Batch No.: 238

Method Blank Laboratory No.: 2003-1006-002

Ongoing Precision and Recovery Laboratory No.: 2003-1006-001

Sample Information

| Client Sample ID: | BB-10-03 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | October 7, 2003 | |
| Collection Time: | 0940 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 6.06 | |
| Sample Type ² : | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2003-1008-007



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: November 18, 2003 November 5, 2003

Sample Receipt Date:

Analyst:

USEPA Method 16231 Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2003-1105-011

Quality Control Batch No.: 242

Method Blank Laboratory No.: 2003-1103-002

Ongoing Precision and Recovery Laboratory No.: 2003-1103-001

Sample Information

| Client Sample ID: | BB-11-03 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | November 4, 2003 | |
| Collection Time: | 1045 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 8.01 | |
| Sample Type ² : | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV | |
|----------------------|-----------|--|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0* | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2003-1105-011



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: December 23, 2003

Sample Receipt Date: December 10, 2003

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2003-1210-038

Quality Control Batch No.: 247-1

Method Blank Laboratory No.: 2003-1210-036

Ongoing Precision and Recovery Laboratory No.: 2003-1210-035

Sample Information

| Client Sample ID: | BB-12-03 Proto | |
|----------------------------|-------------------|--|
| Collection Date: | December 9, 2003 | |
| Collection Time: | 0945 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 7.31 | |
| Sample Type ² : | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV | |
|----------------------|-----------|--|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0* | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 2.0 | 0.2 |
| Cryptosporidium | 0 | 0 |

¹ Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2003-1210-037



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

January 27, 2004

Sample Receipt Date:

January 13, 2004

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium Analytical Report

ASI Sample ID No.: 2004-0113-025

Quality Control Batch No.: 252

Method Blank Laboratory No.: 2004-0112-002

Ongoing Precision and Recovery Laboratory No.: 2004-0112-001

Sample Information

| Client Sample ID: | BB-01-04-PROT | |
|----------------------------|-------------------|---------|
| Collection Date: | January 12, 2004 | |
| Collection Time: | 1030 hrs | T-1717L |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 11.3 | |
| Sample Type ² : | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

1 Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

A Matrix Spike (MS) was not performed with this sample. An MS entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate the acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2004-0113-025



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: February 18, 2004

Sample Receipt Date:

February 4, 2004

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2004-0204-031

Quality Control Batch No.: 255-12

Method Blank Laboratory No.: 2004-0204-007

Ongoing Precision and Recovery Laboratory No.: 2004-0204-006

Sample Information

| Client Sample ID: | BB-02-04-PROTO | |
|-------------------------|-------------------|--|
| Collection Date: | February 3, 2004 | |
| Collection Time: | 1100 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 9.01 | |
| Sample Type: | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

Met applicable Method 1623 acceptance criteria.

Project No.: 2004-0204-029



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: March 22, 2004

Sample Receipt Date: Analyst:

March 10, 2004

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2004-0310-020

Quality Control Batch No.: 260-12

Method Blank Laboratory No.: 2004-0310-017

Ongoing Precision and Recovery Laboratory No.: 2004-0310-016

Sample Information

| Client Sample ID: | BB-3-04-PROTO |
|-------------------------|-------------------|
| Collection Date: | March 9, 2004 |
| Collection Time: | 1030 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | 10.0 |
| Sample Type: | field |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

Met applicable Method 1623 acceptance criteria.

Project No.: 2004-0310-020



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: April 19, 2004

Sample Receipt Date: April 7, 2004

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2004-0407-007

Quality Control Batch No.: 2642

Method Blank Laboratory No.: 2004-0405-002

Ongoing Precision and Recovery Laboratory No.: 2004-0405-001

Sample Information

| Client Sample ID: | BB-4-04-PROTO | |
|-------------------------|-------------------|--|
| Collection Date: | April 6, 2004 | |
| Collection Time: | 0950hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 9.6 | |
| Sample Type: | field | |

Volume and Filtration Information

| Gelman HV |
|-----------|
| 10.0 |
| 10.0 |
| _ |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹ Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

Met applicable Method 1623 acceptance criteria.

Project No.: 2004-0407-006



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

May 21, 2004

Sample Receipt Date:

May 5, 2004

Analyst: sec

USEPA Method 1623¹ *Giardia* and *Cryptosporidium*Analytical Report

ASI Sample ID No.: 2004-0505-032

Quality Control Batch No.: 268-1²

Method Blank Laboratory No.: 2004-0505-020

Ongoing Precision and Recovery Laboratory No.: 2004-0505-019

Sample Information

| Client Sample ID: | BB-05-04-PROTO | |
|-------------------------|-------------------|--|
| Collection Date: | May 4, 2004 | |
| Collection Time: | 0955 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 5.5 | |
| Sample Type: | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV | |
|----------------------|-----------|--|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0 | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹ Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

Met applicable Method 1623 acceptance criteria.

Project No.: 2004-0505-031



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

Analyst:

June 23, 2004

Sample Receipt Date:

June 9, 2004

USEPA Method 1623¹ *Giardia* and *Cryptosporidium*Analytical Report Matrix Spike

ASI Sample ID No.: 2004-0609-044

Quality Control Batch No.: 273-22

Method Blank Laboratory No.: 2004-0609-038

Ongoing Precision and Recovery Laboratory No.: 2004-0609-037

Sample Information

| r | |
|-------------------------|-----------------------------|
| Client Sample ID: | BB-06-04-PROTO Matrix Spike |
| Collection Date: | June 8, 2004 |
| Collection Time: | 0936 hrs |
| Matrix: | raw surface water |
| Sample Turbidity (NTU): | 6.31 |
| Sample Type: | Matrix Spike ³ |

Volume and Filtration Information

| Filter Type: | Gelman HV | |
|----------------------|-----------|--|
| Volume Spiked (L): | 10.0 | |
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0 | |

Analytical Results

| ANALYTE | ESTIMATED NUMBER OF ORGANISMS SPIKED | NUMBER OF ORGANISMS SEEDED / LITER | TOTAL MICROSCOPIC COUNT / LITER | PERCENT RECOVERY |
|-----------------|--------------------------------------|--|---------------------------------------|---------------------|
| Giardia | 99 | 9.9 | 5.0 | 50.5 |
| Cryptosporidium | 99 | 9.9 | 7.0 | 70.7 |

Method: Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

Met applicable Method 1623 acceptance criteria.

³ Note:

A Matrix Spike entails spiking and analyzing a separate field sample to determine the effect of the water matrix on the method's oocyst and cyst recovery. MS samples are analyzed when samples are first received from a new source and every 20th sample thereafter. Percent recoveries are calculated for MS samples to evaluate acceptance criteria of method performance. Calculations are corrected for organisms found in the corresponding field sample.

Project No.: 2004-0609-041



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: June 23, 2004

Sample Receipt Date: June 9, 2004

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2004-0609-043

Quality Control Batch No.: 273-22

Method Blank Laboratory No.: 2004-0609-038

Ongoing Precision and Recovery Laboratory No.: 2004-0609-037

Sample Information

| Client Sample ID: | BB-06-04-PROTO | |
|-------------------------|-------------------|--|
| Collection Date: | June 8, 2004 | |
| Collection Time: | 0936 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 6.31 | |
| Sample Type: | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method: Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

²Note:

Met applicable Method 1623 acceptance criteria.

Project No.: 2004-0609-041



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

July 20, 2004

Sample Receipt Date:

July 7, 2004

Analyst: cjf

USEPA Method 1623¹ *Giardia* and *Cryptosporidium*Analytical Report

ASI Sample ID No.: 2004-0707-048

Quality Control Batch No.: 277²

Method Blank Laboratory No.: 2004-0706-002

Ongoing Precision and Recovery Laboratory No.: 2004-0706-001

Sample Information

| Client Sample ID: | BB-7-04-PROTO | |
|-------------------------|-------------------|--|
| Collection Date: | July 6, 2004 | |
| Collection Time: | 0950 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 6.05 | |
| Sample Type: | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

²Note:

Met applicable Method 1623 acceptance criteria.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2004-0707-048



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

August 18, 2004 August 4, 2004

Sample Receipt Date: Analyst:

USEPA Method 16231 Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2004-0804-025

Quality Control Batch No.: 281-12

Method Blank Laboratory No.: 2004-0804-022

Ongoing Precision and Recovery Laboratory No.: 2004-0804-021

Sample Information

| Client Sample ID: | BB-08-04-PROTO | |
|-------------------------|-------------------|-------------|
| Collection Date: | August 3, 2004 | |
| Collection Time: | 0915 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 5.96 | |
| Sample Type: | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV | |
|-----------------------|-----------|-------------|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0* | |
| Polario Examined (E). | 10.0 | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

²Note:

Met applicable Method 1623 acceptance criteria.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2004-0804-023



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

September 27, 2004

Sample Receipt Date:

September 8, 2004

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium Analytical Report

ASI Sample ID No.: 2004-0908-014

Quality Control Batch No.: 2862

Method Blank Laboratory No.: 2004-0907-002

Ongoing Precision and Recovery Laboratory No.: 2004-0907-001

Sample Information

| Client Sample ID: | BB-09-04-PROTO | |
|-------------------------|-------------------|--|
| Collection Date: | September 7, 2004 | |
| Collection Time: | 1010 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 6.81 | |
| Sample Type: | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED#/L |
|-----------------|---|---------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

1 Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

Met applicable Method 1623 acceptance criteria.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2004-0908-014



Client: Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: October 26, 2004

Sample Receipt Date: October 6, 2004

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2004-1006-043

Quality Control Batch No.: 290-22

Method Blank Laboratory No.: 2004-1006-038

Ongoing Precision and Recovery Laboratory No.: 2004-1006-037

Sample Information

| Client Sample ID: | BB 10-04 PROTO | |
|-------------------------|-------------------|--|
| Collection Date: | October 5, 2004 | |
| Collection Time: | 1010 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 16.3 | |
| Sample Type: | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹ Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

Met applicable Method 1623 acceptance criteria.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2004-1006-043



Tarrant Regional Water District

Address: 140 FM416

Streetman, TX 75859-3019

Report Date:

November 19, 2004

Sample Receipt Date:

November 3, 2004

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2004-1103-043

Quality Control Batch No.: 294-12

Method Blank Laboratory No.: 2004-1103-037

Ongoing Precision and Recovery Laboratory No.: 2004-1103-036

Sample information

| Client Sample ID: | BB-11-04-PROTO | |
|-------------------------|-------------------|--|
| Collection Date: | November 2, 2004 | |
| Collection Time: | 0915 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 11.4 | |
| Sample Type: | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

1 Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

²Note:

Met applicable Method 1623 acceptance criteria.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2004-1103-043



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: December 20, 2004

Sample Receipt Date:

December 8, 2004

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2004-1208-036

Quality Control Batch No.: 299-12

Method Blank Laboratory No.: 2004-1208-026

Ongoing Precision and Recovery Laboratory No.: 2004-1208-025

Sample Information

| Client Sample ID: | BB-12-04-PROT | |
|-------------------------|-------------------|----|
| Collection Date: | December 7, 2004 | ,- |
| Collection Time: | 1002 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 8.37 | |
| Sample Type: | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV | |
|----------------------|-----------|---|
| Volume Filtered (L): | 10.0 | |
| Volume Examined (L): | 10.0* | _ |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | 0 |

¹ Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

Met applicable Method 1623 acceptance criteria.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2004-1208-036



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date:

January 20, 2005

Sample Receipt Date:

January 5, 2005

Analyst: ek

USEPA Method 1623¹ Giardia and Cryptosporidium Analytical Report

ASI Sample ID No.: 2005-0105-039

Quality Control Batch No.: 303-12

Method Blank Laboratory No.: 2005-0105-036

Ongoing Precision and Recovery Laboratory No.: 2005-0105-035

Sample Information

| BB-01-05-PROTO | |
|-------------------|--|
| January 4, 2005 | |
| 1000 hrs | |
| raw surface water | |
| 21.4 | |
| field | |
| | January 4, 2005 1000 hrs raw surface water 21.4 |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0* |
| | |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | 0 |
| Cryptosporidium | 0 | . 0 |

1 Method:

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA).

² Note:

Met applicable Method 1623 acceptance criteria.

*Note:

Two (2) aliquots of 5.0 liters each were examined using IMS and IFA.

Project No.: 2005-0105-039



Tarrant Regional Water District

Address:

140 FM416

Streetman, TX 75859-3019

Report Date: March 3, 2005

Sample Receipt Date: February 9, 2005

Analyst:

USEPA Method 1623¹ Giardia and Cryptosporidium **Analytical Report**

ASI Sample ID No.: 2005-0209-050

Quality Control Batch No.: 308-12

Method Blank Laboratory No.: 2005-0209-032

Ongoing Precision and Recovery Laboratory No.: 2005-0209-031

Sample Information

| Client Sample ID: | BB-02-05-PROTO | |
|-------------------------|-------------------|----------------|
| Collection Date: | February 8, 2005 | " - |
| Collection Time: | 1015 hrs | |
| Matrix: | raw surface water | |
| Sample Turbidity (NTU): | 18.0 | |
| Sample Type: | field | |

Volume and Filtration Information

| Filter Type: | Gelman HV |
|----------------------|-----------|
| Volume Filtered (L): | 10.0 |
| Volume Examined (L): | 10.0 |

Analytical Results

| ANALYTE | TOTAL MICROSCOPIC COUNT / VOLUME EXAMINED | CALCULATED # / L |
|-----------------|---|------------------|
| Giardia | 0 | |
| Cryptosporidium | 0 | 0 |

Samples processed, stained and examined using USEPA Method 1623: Cryptosporidium and Giardia in Water by Filtration, Immunomagnetic separation (IMS), and Immunofluorescence Assay (IFA) Microscopy (USEPA, June 2003).

²Note:

Met applicable Method 1623 acceptance criteria.

Project No.: 2005-0209-050